REMARKS/ARGUMENTS

The Office Action has been carefully considered. It is respectfully submitted that the issues raised are traversed, being hereinafter addressed with reference to the relevant headings appearing in the Detailed Action section of the Office Action.

Specification

A paragraph on Page 1 of the specification has been updated: the docket numbers have been replaced by the corresponding US Application Numbers. The Applicants submit that these amendments introduce no new matter.

Claim Objections

At page 2 of the Office Action, the Examiner has objected to claims 6 and 15 due to informalities. Claims 6 and 15 have been amended accordingly as suggested by the Examiner, and therefore we respectfully request that the objection be withdrawn.

Claim Rejections – 35 USC § 103

At page 3 of the Office Action, the Examiner rejects claims 1 to 39 as being unpatentable over Pierenkemper et al (US Patent No. 6,641,042) in view of Dymetman et al (US Patent No. 6,330,976).

Claim 1 has been amended with the part of the subject matter of claim 12, wherein the indicating data is indicative of a position of the sensed coded data on the interface surface. Claim 12 has subsequently been amended.

Reconsideration and withdrawal of this rejection is respectfully requested in light of the following comments.

Obviousness can only be established by combining or modifying teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

In particular, the MPEP states at §2143 "*Basic Requirements of a Prima Facie Case of Obviousness*" that:

> "*... three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.*
>
> *The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).*"

On page 5 of the Office, the Examiner states that Pierenkemper et al shows a sensing device generating indicating data which is indicative of a position of the sensed coded data. However, the Examiner has not indicated where in Pierenkemper et al this feature is disclosed.

Pierenkemper et al that a localization of the barcodes in a reading area may be determined. However, the localization described by Pierenkemper et al is not the same as a position of the barcodes on the object. The localization is a three-dimensional coordinate indicating the position of the barcode in the reading area. This contrasts to a position on the interface surface, as required by amended claim 1.

This contrast is indicated emphasised Pierenkemper et al by at lines 36 to 41 of column 5, where it states:

> *"...a very precise localization of the barcodes 1,3 and thus the objects 5,6 within the reading area 15 is possible with the barcode readers 16, 17."*

Thus, only a localization of the barcode can be determined, as disclosed by Pierenkemper et al. However, this contrasts to amended claim 1 which requires determining a position on the interface surface.

To help clarify this distinction, we provide the following example based on Figure 1 of Pierenkemper et al. The localization of barcode 3 may determined to be (X1, Y1, Z1). However, if the object was orientated differently on the conveyor belt, the localization of barcode 3 may be determined to be (X2, Y2, Z2). This contrasts to the sensed coded data which is indicative of a position on the interface surface. Thus, in either of the orientations described, the position of the sensed coded data on the interface surface would be the same. Thus, position on the interface surface is very different to localization in the reading area.

Pierenkemper et al determines the localization of the barcodes and thus the objects so as to overcome the problem with several objects being simultaneously located in the reading field. This is emphasised by the first object statement in column 1 which attempts to overcome the problem of several objects being simultaneously located in the reading field. However, there is no suggestion in that the position on the interface surface of the sensed coded data could be useful in any sense. There would be no advantage or success gained if Pierenkemper et al did determine the position of the sensed coded data on the interface surface.

Therefore, as Pierenkemper et al provides no suggestion or motivation as to why a person skilled in the art would modify Pierenkemper et al such that a position of the sensed coded data on the interface surface, the disclosure of Dymetman et al should not be combined with Pierenkemper et al, as stated by MPEP states at §2143.

Thus, amended claim 1 is patentable, as there is no suggestion or motivation provided in Pierenkemper et al that a position of the barcode on the object could be determined. Thus, the first basic criteria of *prima facie* obviousness cannot be established in regard to claim 1 in that "*...there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings."*

Furthermore, amended claim 1 is patentable, as there is no advantage to be gained from determining a position of the barcode on the object as disclosed in Pierenkemper et al, and thus there is no reasonable expectation of success. Therefore, the second basic criteria of *prima facie* obviousness cannot be established in regard to claim 1 in that *"...there must be a reasonable expectation of success."*

Therefore, we respectfully submit that claim 1 is patentable. Similar amendment to claim 1 and 12 have been made to independent claim 15 and dependent claim 24, and therefore the above argument apply to these claims. Reconsideration and withdrawal of the rejection is respectfully requested.

If the Examiner does not agree with our arguments above, we believe that a number of the dependent claims are inventive over the combined teaching of Pierenkemper et al with Dymetman et al.

In particular, claim 3 is patentable over Pierenkemper et al in view of Dymetman et al. On page 3 of the Office Action, the Examiner stated that the subject matter of claim 3 is shown by Pierenkemper et al at column 5, lines 55 to 58. Lines 55 to 58 of column 5 refer to an angle indicating a tilting of the barcode reader around the x axis. However, this section fails to describe utilising a sensor adapted to sense a spot of radiation, and wherein in use, the sensing device is moved relative to the product item to thereby sense the barcode.

As described at lines 21 to 25 of column 6 of Pierenkemper et al, *"[t]he scan angles required for the localization of the respective location coordinates of a barcode and the coordinates x_0, y_0, z_0 of a barcode reader are normally known from the adjustment of the system or can be determined by learning routines."* Thus, Pierenkemper et al only teaches determining the scan angles using learning routines. Furthermore, Pierenkemper et al fails to suggest any form of feedback to the barcode reader which is used to adjust the angle which the barcode reader may be placed relative to the product. This is evident from the embodiment shown in Figure 1 where two barcode readers are required such that barcodes placed in different positions or orientations can be read. Although Pierenkemper et al describes that only one barcode reader may only be required, if the product item is placed in a position such that the barcode is not in the line of the scan angle, there is no way which the system can adjust the angle of the barcode reader whilst the product is travelling along the conveyor belt such as to read the barcode.

We therefore respectfully submit that the three basic criteria as stated by MPEP at §2143 has not been shown. As Pierenkemper et al in combination with Dymetman et al fails to show all the claim limitations, in particular that the coded data sensor and barcode sensor utilise a sensor adapted to sense a spot of radiation, and wherein in use, the sensing device is moved relative to the product item to thereby sense the barcode, the obviousness rejection should be withdrawn.

Reconsideration and withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully requested that the Examiner reconsider and withdraw the rejections under 35 U.S.C. §103(a). The present application is believed to be in condition for allowance. Accordingly, the Applicant respectfully requests a Notice of Allowance of all the claims presently under examination.

Very respectfully,

Applicants:

PAUL LAPSTUN

KIA SILVERBROOK

C/o: Silverbrook Research Pty Ltd
393 Darling Street
Balmain NSW 2041, Australia

Email: kia.silverbrook@silverbrookresearch.com

Telephone: +612 9818 6633

Facsimile: +61 2 9555 7762